

NONPOINT SOURCE TIMES

Volume 11, Issue 2

Spring 2002

13th Annual NPS Meeting Here in Maine!

Plan to attend!

The New England Interstate Water Pollution Control Commission (NEIWPCC) and this year's co-host, the Maine Department of Environmental Protection, announce the 13th ANNUAL NONPOINT SOURCE MEETING

May 21 - May 23, 2002 Spruce Point Inn, Boothbay Harbor, Maine

This 3-day meeting consists of a keynote address, workshop, field trip, over 20 different presentations in plenary and concurrent sessions, display tables, and time for informal discussion and exchanges. The meeting commences at 10:00 on Tuesday, May 21 and concludes at 12:30 on Thursday, May 23.

The Annual Nonpoint Source Meeting is the premier northeast regional forum for sharing information and improving communication on nonpoint source (NPS) issues and projects at local, state, and regional levels. This year's meeting features a workshop and several sessions on the theme of social marketing to influence behaviors to control NPS pollution. In addition, it will feature presentations on all facets of watershed management, including implementing best management practices; using innovative methods to detect and control NPS pollution; estimating NPS pollutant load reductions; and developing NPS surveys and management plans. A field trip will showcase a variety of BMPs associated with a lake watershed protection project.

Further information, including the detailed agenda and registration form, will be available in mid-March on NEIWPCC's web site: www.neiwpcc.org/events.html. Or Contact information: Jennifer Hunter, NEIWPCC, (978) 323-7929; jhunter@neiwpcc.org or check out the web site after March 15: www.neiwpcc.org/npsMeeting.html

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RFP For NPS Control Projects

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REQUEST FOR PROPOSALS Nonpoint Source Pollution Control Projects Maine Department of Environmental Protection

Maine DEP expects to issue the FY 2003 Request For Proposals for Nonpoint Source Projects by early April 2002. Projects are to help restore or protect lakes, streams, or coastal waters that are polluted or considered threatened. Grants will be funded with monies provided to Maine by U.S. Environmental Protection Agency under the Section 319(h) of the Federal Clean Water Act. Maine public organizations such as state agencies, soil and water conservation districts, regional planning agencies, watershed

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Maine Stream Team Program

Wondering what is happening this summer with the Maine Stream Team Program?

Check out their web site at: http://www.state.me.us/dep/blwq/docstream/team/ streamteam.htm

&

NPS Training Center

An updated training schedule is available on the web at http://www.state.me.us/dep/blwq/training/nps.htm

Maine NEMO In Transition

Big changes are coming to the Maine Nonpoint Education for Municipal Officials (NEMO) initiative. With a new home and new coordinator, NEMO is graduating from pilot project to state-wide program. After two years at the Cumberland County Soil & Water Conservation District, the program is now located at the Partnership for Environmental Technology Education (PETE), located on the campus of the Southern Maine Technical College in South Portland. Castallo is the new Maine NEMO Coordinator. Jodi comes to the position with an educational background in biology. environmental studies and environmental education, and experience working with municipalities as a Water Resource Specialist with RHI, Northeast Rural Community Assistance Program. Jodi will be focusing on the development of a "train the trainer" approach for NEMO, whereby local and regional partners will be given training on how to present NEMO at the local level. Jodi participated in a National NEMO conference in January, and is receiving additional training from the national NEMO team in Connecticut. For more information on the program, Jodi can be reached at 767-2539 or jcastallo@smtc.net

Look for updates on the program in future issues of the NPS Times!

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districts, municipalities, and nonprofit 501(c)(3) organizations are eligible to receive NPS grants.

The RFP will invite watershed-scale projects that benefit waters listed as "NPS Priority Watersheds" or "TMDL waters". A portion of funds will be allocated for projects crafted to help restore 303(d) listed waters that have an approved TMDL analysis. Three types of projects will be invited: Watershed Projects, Watershed Surveys, and Development of Watershed Management Plans. DEP plans to devote about 80% of the funds for NPS Watershed Projects. DEP encourages you to develop a NPS Watershed Project. A watershed project is designed to prompt widespread adoption of BMPs needed to achieve a significant reduction of pollutant loads to a water body. Significant pollutant load reductions will help restore or protect water quality.

There is considerable opportunity to obtain a NPS grant to help protect or restore Maine's clean waters. Last year, DEP was able to fund 20 projects out of the 23 project proposals.

The RFP will be available at the DEP website www.state. me.us/dep/blwq/grants.htm#319 or by contacting Norm Marcotte, Maine Department of Environmental Protection, Division of Watershed Management, 17 State House Station, Augusta, ME 04333, tel. 207-287-7727

Mark your Calendars!

As part of a continuing series on Innovative Erosion Control Products, a conference on Turf Reinforcement Mats will be held at the Augusta Civic Center on March 13th. The event is being co-sponsored by the Maine DEP, the Maine DOT, the Pine Tree Chapter of the Soil Water Conservation Society, E.J. Prescott, A.H. Harris and Paris Farmer's Union.

The intent of the conference is to provide guidance on design and construction techniques using Turf Reinforcement Mats. These mats when installed properly can be used for various erosion control applications including as a substitute for rock riprap. Conference presentations will point out the appropriate uses and benefits realized when using these products correctly.

The conference is intended for all professionals who want to know more about turf reinforcement mats including contractors, consultants, regulators, landscape architects, engineers and site designers. Cost to attend is just \$35.

For more information or to register for the conference, please contact Bill Laflamme at the Maine Nonpoint Source Training and Resource Center at 287-7726 or William.N.Laflamme@state.me.us



Maine Sea Grant Request For Proposal s

Paul Anderson is pleased to announce Maine Sea Grant's annual request for proposals for 2003-2004 research funds. You can find the RFP and preliminary proposal guidelines on our web site at : www.seagrant.umaine.edu

INVITATION FOR PRELIMINARY PROJECT PROPOSALS: 2003 - 2004 - Maine Sea Grant Deadline for Preliminary Proposals: 4:30 p.m. Friday, 15th March 2002 Late applications will not be accepted.

The Maine Sea Grant Program invites preliminary proposals for research projects that will be funded in February 2003. Operating under the guidelines of, and in partnership with, the National Sea Grant Office of the National Oceanic and Atmospheric Administration, the mission of Maine Sea Grant is to play a leadership role in marine science research and education and to promote their use for the development, management, and stewardship of marine and coastal resources.

Although Maine Sea Grant is administered by the University of Maine, the research competition is open to all faculty and staff at any public or private research or higher education institution. In addition, Sea Grant programs in the northeast are receptive to considering multi-program support for collaborative projects involving investigators from two or more states.

Proposals should normally address the marine and coastal issues identified in the Maine Sea Grant 2001-2005 Strategic Plan "Marine Science for Maine People" (January 2001). The three major theme areas are Ecosystem Health, Aquaculture, and Fisheries. Maine Sea Grant's Policy Advisory Committee has identified the following research priorities for the 2003 competition. However, these are not intended to exclude proposals in other areas.

Studies on aspects of nearshore oceanography, recruitment, ecology, life history, gear enhancement, and abundance that affect species targeted fisheries, particularly scallops, clams, sea cucumbers, seaweed, and shrimp.

Aquaculture issues relating to production technologies or environmental impacts of new and existing farmed species. Legal, socioeconomic, and policy issues related to the coastal and marine environment. Studies to increase our knowledge of the dynamics of pollution on coastal ecosystems. Assessing the impacts of tourism on coastal ecosystem processes and coastal communities. Studies to increase our understanding of the ecological consequences of habitat restoration activities such as dam removal. Because Sea Grant seeks to foster the highest quality marine research, creative and rigorously conceived proposals in areas not mentioned in the Strategic Plan will also be considered. All proposals must contribute to the improved understanding, utilization, sustainability, or management of coastal and marine resources. Sea Grant funding requires 50% non-federal match. All preliminary proposals must indicate source and level of available non-federal match. Proposals without sufficient match will not be considered. The development and review of Sea Grant proposals will be a three-step process:

Guidelines for preparing Preliminary Proposals and copies of the Executive Summary of the Strategic Plan are available on the World Wide Web (http://www.seagrant.umaine.edu)



Soil Campaign Materials Available

As described in the Winter Issue of the NPS Times (Volume 11 Issue 1), Maine's pilot Soil Erosion Campaign was a success. (A quick refresher: Maine DEP worked with a marketing research firm and an adverting agency to develop and evaluate post cards, newspaper adds and radio messages designed to raise awareness that soil is a pollutant.) As a result. Maine DEP would like to make these proven materials available to others in the state who would like to promote a better understanding that soil is a pollutant to Maine's waters. DEP has printed up all 4 copies of the post card and they are available to lake associations, 319 projects, and others who may wish to use them as part of their educational effort

In addition, the newsprint adds and radio messages are available electronically. For more information on these materials contact Kathy Hoppe, Maine DEP 207-764-0477 or kathy.m. hoppe@state.me.us



Sel ected Findings and Current Perspectives on Urban and Agricul tural Water Quality

Selected Findings and Current Perspectives on Urban and Agricultural Water Quality by the National Water-Quality Assessment Program

Studies by the USGS National Water-Quality Assessment (NAWQA) program in the last decade describe waterquality conditions in nearly 120 agricultural and 35 urban watersheds ("urban" primarily refers to residential and commercial development over the last 50 years). The findings show that for both urban and agricultural areas, nonpoint chemical contamination is an issue. Much work still needs to be done in urban areas with point source contamination as well, including infrastructure improvements. Appreciable improvements in overall water quality, however, will depend upon effective management of point and nonpoint sources. The findings also show that waterquality conditions and aquatic health reflect a complex combination of land and chemical use, land-management practices, population density and watershed development, and natural features, such as soils, geology, hydrology, and climate. Contaminant concentrations vary from season to season and from watershed to watershed. Even among seemingly similar land uses and sources of contamination, different areas can have very different degrees of vulnerability and, therefore, have different rates at which improved treatment or management can lead to water-quality improvements.

Water Quality in Agricultural Watersheds

- * Nitrogen and phosphorus in surface water commonly exceed levels that contribute to excessive algae. For example, average annual concentrations of phosphorus in nearly 80 percent of streams sampled in agricultural areas were greater than the U. S. Environmental Protection Agency (USEPA) desired goal for preventing nuisance plant growth in streams. Excessive plant growth can lead to low dissolved oxygen, which can be harmful to fish and other aquatic life.
- * Nitrate is often elevated above background levels in shallow ground water underlying farmland. Concentrations in about 20 percent of shallow wells sampled in agricultural areas exceeded the USEPA drinking water standard. This result is a concern in rural areas where shallow ground water is used for domestic supply; these domestic wells are not regulated and owners often do not know the

quality of their well water or whether their wells are vulnerable to contamination. Nitrate is most often elevated in karst (carbonate) areas or where soils and aquifers consist of sand and gravel. These natural features enable rapid infiltration and downward movement of water and chemicals. Some of the more vulnerable areas are the Central Valley of California, and parts of the Pacific Northwest, the Great Plains, and the Mid-Atlantic region. In contrast, ground-water contaminants underlying farmland in parts of the upper Midwest are barely detectable, despite similar high rates of chemical use. In these areas ground-water contamination may be limited because of relatively impermeable, poorly drained soils and glacial till that cover much of the region, and because tile drains provide quick pathways for runoff to streams.

- * Pesticides are widespread. At least one pesticide was detected in more than 95 percent of stream samples. Pesticides were detected in more than 60 percent of shallow wells sampled in agricultural areas.
- * Pesticides commonly occur in mixtures. Two-thirds of stream samples collected in agricultural areas contained 5 or more pesticides, and more than one-quarter of the samples contained 10 or more. Ground water contained fewer pesticides; about 30 percent of the wells sampled contained 2 or more. Concentrations of pesticides generally are low and below drinking-water standards. However, the risk to humans and the environment from present-day low levels of contaminant exposure remains unclear. For example, current standards and guidelines do not yet account for exposure to mixtures, and many pesticides and their breakdown products do not have standards or guidelines.
- * Herbicides—most commonly atrazine and its breakdown product desethylatrazine, and metolachlor, cyanazine, and ala-chlor occur more frequently and usually at higher concentrations in agricultural streams and ground water than in urban waters. Their occurrence is linked to their use; they rank in the top five in national herbicide use for agriculture.
- * Insecticides that were used in the past still persist in agricultural streams and sediment. DDT was the most commonly detected organochlorine compound, followed by dieldrin and chlordane. Their uses were restricted in the 1970s and 1980s and, yet, more than 20 years later, one or more sediment-quality guidelines were exceeded at more than 20 percent of agricultural sites.

Water Quality in Urban Watersheds

* Concentrations of fecal coliform bacteria commonly exceed recommended standards for water-contact recreation.

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- * Concentrations of total phosphorus are generally as high in urban streams as in agricultural streams. More than 70 percent of sampled urban streams exceeded the USEPA desired goal for preventing nuisance plant growth.
- * Insecticides, such as diazinon, carbaryl, chlorpyrifos, and malathion, occur more frequently, and usually at higher concentrations in urban streams than in agricultural streams. Concentrations are low in urban streams, rarely exceeding USEPA drinking-water standards. However, effects on aquatic life may be more of a concern. Concentrations of insecticides exceeded at least one guideline established to protect aquatic life in every sampled urban stream.
- * Herbicides are widespread in surface water (detected in 99 percent of urban stream samples) and ground water (detected in more than 50 percent of sampled wells). Most common are those applied to lawns, golf courses, and road right-of-ways, such as atrazine, simazine, and prometon.

Similar to agricultural areas, pesticides in urban waters commonly occur in mixtures; nearly 80 percent of stream samples contained 5 or more pesticides. Two of the most commonly detected insecticides in mixtures were diazinon and chlorpy-rifos; common herbicides detected were simazine and prometon.

- * Sediment in urban streams is associated with higher frequencies of occurrence of DDT, chlordane, and dieldrin and higher concentrations of chlordane and dieldrin than sediment in agricultural streams. Sediment-quality guidelines for organo-chlorine pesticides were exceeded at 36 percent of sampled urban sites.
- * Volatile organic compounds, which are used in plastics, cleaning solvents, gasoline, and industrial operations, occur widely in shallow urban ground water. Some of the most frequently detected of the 60 analyzed compounds were the commercial and industrial solvents trichloroethene (TCE), tetrachloroethene (PCE), and methylene chloride; the gasoline additive methyl tert-butyl ether (MTBE); and the solvent and disinfection by-product of water treatment, trichloromethane (also known as chloroform).
- * Concentrations of selected trace elements, such as cadmium, lead, zinc, and mercury, are elevated above background levels in populated urban settings, most likely caused by emissions from industrial and municipal activities and motor vehicles. Sediment cores from streambeds and reservoirs, which can be used to track changes over long time periods, indicate that lead increased from 1940s to the 1970s, and began to decrease after it was removed from gasoline. Concentrations are not yet down to background levels. Decreases also are noted for DDT and chlordane.

- * In contrast to lead, DDT, and chlordane, sediment cores indicate that zinc and polycyclic aromatic hydrocarbons (PAHs, which result from fossil fuel combustion) are increasing. These increases most likely relate to increasing motor vehicle traffic in watersheds. Sediment-quality guidelines for PAHs were exceeded at more than 40 percent of urban sites.
- * Toxic compounds in streambed sediment in urban areas, such as DDT, chlordane, dieldrin, and PCBs, also were found in fish tissue, often at higher concentrations than in the sediment. One or more organochlorine compounds were detected in 97 percent of whole fish samples collected at urban sites, and PCBs were detected in more than 80 percent of whole fish samples. Concentrations of organochlorine compounds exceeded guidelines to protect wildlife at more than 10 percent of urban sites; wildlife guidelines for PCBs were exceeded at nearly 70 percent of urban sites. These findings have contributed to decisions by some states to issue fish-consumption advisories.
- * Deteriorated water quality and sediment, as well as habitat disturbances, contribute to degraded biological communities in urban streams. The greatest effects are seen in areas with the highest human population densities and watershed development. Pollution-tolerant algae and aquatic invertebrates (such as worms and midges), as well as omnivorous fish communities, prevail at the affected sites.

Contacts for additional information or questions:

Tim Miller (703) 648-6868 (tlmiller@usgs.gov)
Pixie Hamilton (804) 261-2602 (pahamilt@usgs.gov)
Or http://water.usgs.gov/nawqa

Conservation Expo

Franklin Co. SWCD, with the financial assistance of DEP and the CLP program have planned a Conservation Expo at the University of Maine at Farmington on April 17th. The Expo will run from 8:00 am to 8:00 pm.

There will be 38 workshops, training sessions and seminars. Topics include:

Unpaved Road Maintenance
CLP Re-certification
Proper Use of Pesticides
Pond Construction & Maintenance
DOT's Drainage, Drainage, Drainage program
Planting & Designing a Vegetated Buffer
Planning Your Woods Roads & Trails
Plus much more

FMI contact Rosetta Thompson at 207-778-4879 or rosetta-thopason@me.nacdnet.org



EPA Announces New Waterway Initiative

EPA Announces New Initiative to Protect and Preserve America's Waterways

President Bush will include \$21 million in his 2003 budget for a new EPA initiative to protect, preserve, and restore waterways across the country. This effort was announced by EPA Administrator Christie Whitman during a visit to the Minnesota Valley National Wildlife Refuge in the Minneapolis/St. Paul area.

The Administrator announced as part of this community-based initiative, EPA will target up to 20 of this country's most highly-valued watersheds for grants. EPA will be working cooperatively with state governors, tribes and other interested parties on this initiative. This program will also support local communities in their efforts to expand and improve existing protection measures with tools, training and technical assistance.

"As we mark the 30th anniversary of the Clean Water Act this year, we have much to celebrate and many challenges left to face with regard to our nation's water resources," Whitman said. "I have heard a watershed defined as "communities connected by water," a good reminder that we all live downstream from someone. I am proud to say that the Bush Administration needs no reminding of that fact.

"President Bush understands the importance of watershed protection and he is taking action to make America's waterways cleaner and healthier for the families that enjoy them," Whitman continued. "In his 2003 budget, President Bush has included \$21 million for a new EPA initiative to copy successful approaches and techniques to protect highly valued watershed resources throughout the country. With the President's commitment to watershed protection, I am confident that we can preserve and protect our precious waterways for future generations."

Whitman noted that the program "recognizes the important role that states and local communities have in helping to achieve our common goals, by giving them the power to do what works."

Water quality problems including habitat loss and alteration, nutrient enrichment, pathogens, and invasive species continue to harm watersheds nationwide. These problems prevent our resources from meeting water quality goals and deprive the public of economic, recreation, and drinking water opportunities. The problems are complex and require local assessment, involvement and commitment. This investment will capitalize on the lessons learned

from existing community-based protection efforts. Information on the watershed program is available at http://www.epa.gov/owow/watershed/.

Briefs & Updates

Cutting Rules

The board unanimously approved the rule amendments to Chapter 305 Permit by Rule Standards and Chapter 310 Wetlands Protection on December 6. These rule changes are in response to a Legislative Resolve directing both the DEP and Dept. of Conservation (read LURC) to adopt consistent rules to regulate the cutting and removal of vegetation, excluding timber harvesting, adjacent to protected natural resources. Staff of both departments met to develop a consistent approach to cutting and agreed that the standards contained within municipal shoreland zoning should be the basis for both LURC and DEP regulation. LURC already regulated cutting and clearing in areas adjacent to all natural resources but proposed to modify its rules to include the point rating system found in the shoreland zoning standards. The DEP proposed to adopt the same standards as an exemption in the Natural Resources Protection Act. approved rule amendments relate primarily to the licensing of activities that exceed the cutting and clearing standard.

LURC approved its rule amendments on December 13. Both department's rule amendments are considered "major substantive" and must be sent to the Legislature for its review and approval before final adoption. Questions and requests for information about the department's rules should be directed to Mike Mullen at 287-4728. Note: to see copy, go to: http://www.state.me.us/dep/blwq/rule.htm

Pinpointing Nonpoint Solutions

Arguably, dealing with point source pollution has been the easy part. Now the very difficult issues of nonpoint source pollution, including contaminants in stormwater runoff, total maximum daily loads (TMDLs) and animal wastes, must be faced. To sneak a peek at possible Clean Water Act issues the current Congress may consider, see the just-released report titled *Clean Water Act Issues in the 107th Congress.* The report, along with other Congressional Research Service Reports related to water is at:

http://www.cnie.org/NLE/CRS/Detail.cfm?Category=Water.

Congress may or may not get to nonpoint issues this session, but other entities are addressing the problem. For

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example, state regulators just approved stringent new runoff rules for south Orange County, California. The new rules include requirements that developments include devices to slow and cleanse runoff, and requirements that polluted runoff from storm drains be filtered or diverted before reaching waterways. The Los Angeles Times has more on this story at http://www.latimes.com/news/ science/la-000011392feb14.story. Similar standards are in place in other California counties. Rules to control runoff pollutants are under consideration by the Wisconsin Legislature as reported by Water Tech Online at http:// www.watertechonline.com/news.asp? mode=4&N_ID=28999. Street sweepers are gaining new popularity as a way to clean up contaminants that would otherwise go down storm drains. The Stormwater Manager's Resource Center has information on street sweepers at http://www.stormwatercenter.net/ Pollution_Prevention_Factsheets/ ParkingLotandStreetCleaning.htm, as well as general information on managing runoff at http://www. stormwatercenter.net.

Bacteria Monitoring in Two Southern Maine Watersheds

A new study of bacteria contamination in the Webhannet and Little River watersheds in southern Maine could lead to the reopening of long-closed clam flats and safer recreation. The two-year project, Microbial Source Tracking in Two Southern Maine Watersheds, has been funded by a \$193,970 grant to the University of Maine from the Cooperative Institute for Coastal and Estuarine Technology at the University of New Environmental Hampshire. The project will involve scientists and citizen volunteers from University of Maine Sea Grant, University of Southern Maine. Wells National Estuarine Research Reserve, the Jackson Estuarine Lab at University of New Hampshire and the Maine Conservation Corps. Contact Kristin Whiting-Grant 207-646-1555, ext. 115, kristen. whiting-grant@maine.edu

\$100 Million Grant Program Proposed to Encourage Private Conservation Efforts

[US DOI press release] 1/31/02. President Bush will request \$100 million in his 2003 budget for a new cost-share program, the Cooperative Conservation Initiative, to give landowners, land-user groups, environmental organizations, communities, local and state governments and industries the resources to undertake conservation projects that advance the health of the land and benefit people. The president will also ask Congress for \$50 million for the Landowner Incentive Program, which provides funds to states, tribes and territories to make cost-share grants to landowners who voluntarily participate in the protection of habitat for endangered, threatened or other at-risk species on private or Tribal lands. In addition, the president's

budget includes \$10 million for the Private Stewardship Grant Program, another initiative in last year's budget, which directly assists individuals or groups involved in the voluntary conservation of wildlife habitat on private lands. For the complete press release visit http://www.doi.gov/news/congrant.html For a fact sheet on the new program visit http://www.doi.gov/news/confaq.html

EPA Announces New Initiative to Protect and Preserve America's Waterways

[from Concepcion Cahanap, US EPA] 1/25/02. President Bush will include \$21 million in his 2003 budget for a new EPA initiative to protect, preserve, and restore waterways across the country. This effort was announced by EPA Administrator Christie Whitman during a visit to the Minnesota Valley National Wildlife Refuge in the Minneapolis/St. Paul area. The Administrator announced as part of this community-based initiative, EPA will target up to 20 of this country's most highly-valued watersheds for grants. EPA will be working cooperatively with state governors, tribes and other interested parties on this initiative. This program will also support local communities in their efforts to expand and improve existing protection measures with tools, training and technical assistance. This investment will capitalize on the lessons learned from existing community-based protection efforts. Information on the watershed program is available at http://www.epa.gov/ owow/watershed/

Student Essay Contest to Celebrate CWA Anniversary

To celebrate the 30th anniversary of the Clean Water Act in 2002, the Clean Water Network is sponsoring an essay contest for K-12 students. The topic is "Why students need clean water" The deadline: April 15, 2002. The prize: A trip to Washington, D.C., to meet members of Congress. CWN is also looking for water photos from shutterbugs of all agesfrom the pristine scenes to the downright dirty. CWN will publish the best in its report on three decades of the fight for cleaner water. For more information, visit www.cwn.org/docs/30thanniversary/30thhomepage.htm

Minnesota Shoreland Management Resource Guide

The Minnesota Shoreland Management Resource Guide (http://www.shorelandmanagement.org/)provides easy access to information about sustainable shoreland practices to improve management of Minnesota's lakes and rivers. By putting resource materials in the hands of local government and citizens, the Shoreland Guide offers an effective, low cost means to reach the people who make the everyday decisions that impact our lakes and rivers. The Web site contains scientific and technical background, camera-ready quick and easy answers (FAQs), highlights of citizen action, and contact information for Minnesota counties.



NONPOINT SOURCE WATER POLLUTION CONTROL PROJECTS NPS Grant Awards, Outcome of the FFY 2002 Request For Proposals

Maine Department of Environmental Protection February 21, 2002

Summary of the 20 NPS Water Pollution Control Projects scheduled to receive NPS grant awards in April 2002. MDEP issued the Request For Proposals for projects March 1, 2001. NPS Projects helps local communities recognize water pollution sources in watersheds and take action to protect or restore clean water.

Project ID#	Term	Title / Sponsor / Purpose	Grant	Match	Total
2002R-01	36 mos.	Sabattus Pond Watershed Project, Phase I Androscoggin Valley Soil and Water Conservation District Reduce sediment loading, reduce the magnitude and duration of algae blooms, and improve or maintain the water quality of the lake by providing technical assistance to towns and property owners, installing conservation practices, and holding educational workshops and public activities.	100,000	67,000	167,000
2002-02	12 mos.		11,249	16,841	28,090
2002R-03	24 mos.	York River Watershed Survey and Watershed Management Plan Wells National Estuarine Research Reserve Conduct a watershed survey to locate and prioritize key NPS pollutants; recommend solutions to those problems using appropriate BMP's and changes in land use; and to utilize survey findings to create a WMP for the York River watershed.	42,694	28,543	71,237
2002-04	24 mos.	Forest Lake Watershed Management Plan Project Cumberland County Soil and Water Conservation District Develop the Forest Lake Watershed Management Plan. The project will collect information about the watershed's specific NPS pollution problems and natural resources and work with the community and town officials to develop locally supported water quality goals, objectives and action strategies for protecting Forest Lake. The project will incorporate this information into a formal watershed management plan, which will be used to guide long-term lake protection and enhancement efforts.	27,622	20,218	47,840
2002P-05	12 mos.	Long Lake Watershed Survey, Phase III Town of St. Agatha Continue to identify sources of NPS pollution in the Long Lake watershed by conducting Phase III of the Long Lake watershed survey. The Phase III area has two specific short term goals which are: (1) to expand citizen awareness and involvement in identifying sources of NPS pollution in the south sub basins of the Long Lake Watershed; and, (2) to prioritize identified sites for future remediation projects. The long term goal of the surveys is prompt use of appropriate BMPs to protect Long Lake.	11,250	10,500	21,750

2002R-06	36 mos.	Sunday River Subwatershed NPS Project - Phase I Oxford County Soil and Water Conservation District Foster intensive implementation of best management practices on 32 identified NPS sites, primarily in the Barkers Brook and Merrill Brook sub-watersheds, and along the Sunday River Road. This represents 30 percent of the total off-river NPS sites (106) that were identified in the 2000 watershed survey, or 53 percent of the high impact off-river NPS sites. The watershed survey will be completed for the western half of the watershed and provide valuable information; BMPs will be installed for at least three sites identified in this survey. Phase I is a component of a comprehensive strategy for river water quality improvement and river restoration.	96,649	78,914	175,563
2002R-07	12 mos.	Sebasticook Lake Watershed Project, Phase I Penobscot County Soil and Water Conservation District Reduce soil erosion and polluted runoff by installing water quality best management practices (BMPs) on 10 to 20 medium and high priority NPS sites with cost share and technical assistance. Reduction of pollutant loads will be estimated by using soil loss avoidance calculations. Outreach to towns and watershed residents will be conducted to promote continuation of watershed restoration actions. The project will help restore the water quality of Sebasticook Lake by implementing actions to reduce external total phosphorus loads called for in the Sebasticook Lake TMDL final report, February 2001.	21,310	15,540	36,850
2002-08	24 mos.	Norway Lakes Improvement Project - Phase III Androscoggin Valley Council of Governments Reduce sediment and phosphorus loading to the four lakes in Norway through three activities: 1) address major problems with camp roads and town roads so that the water quality of the three priority water bodies will be maintained and improved, 2) educate the public, including camp road owners, using a combination of public information activities and workshops which focus on demonstrations of BMPs and 3) provide technical assistance to property owners, taxpayers, road crews and contractors so that they will understand, use and support Best Management Practices for lake protection.	44,700	29,800	74,500
2002-09	12 mos.	Kennebunk Pond Watershed Survey York County Soil and Water Conservation District Identify, document, and prioritize soil erosion and phosphorus pollution sites in the Kennebunk Pond Watershed and to recommend Best Management Practices (BMP) that can be installed to mitigate problems at each of these sites. The secondary purpose of the survey is to help raise community awareness and encourage the mitigation of identified sites. The long-term goal is to reduce watershed pollutant loading to help protect and improve the water quality of Kennebunk Pond.	6,152	6,210	12,362
2002P-10	12 mos.	Trout Brook Watershed Survey South Portland Land Trust Identify and prioritize the primary sources of NPS pollution and define strategies for mitigating these sources of pollution in the Trout Brook Watershed.	7,117	5,563	12,680

2002-11	24 mos.	New Meadows River Watershed: Lower Watershed Survey and Management Plan Brunswick, Town of 1) Complete the watershed survey for the entire watershed; 2) increase citizen involvement; 3) to expand local awareness of NPS pollution; 4) make general recommendations to landowners for mitigating or removing sources of NPS pollution; and 5) develop and disseminate a comprehensive, locally supported New Meadows River Watershed Management Plan. Following completion of the management plan, the New Meadows River Watershed Project Steering Committee (a stakeholder body representing communities, citizens and state and federal agencies) will guide implementation of the plan.	35,000	23,350	58,350
2002R-12	mos.	West Branch, Sheepscot River Water Quality Restoration Project - Phase II Kennebec County Soil and Water Conservation District Restore water quality in the West Branch of the Sheepscot River to attain AA classification and support high quality aquatic and Atlantic salmon habitat. The West Branch fails to attain AA water quality standards for bacteria and dissolved oxygen. Atlantic salmon is listed as an endangered species in the river. Atlantic salmon populations have declined within the entire Sheepscot River, in part, due to sedimentation of spawning habitat, high water temperatures and other habitat factors. The project will provide technical and financial assistance to towns and landowners to prompt use of BMPs to reduce polluted runoff from roads, agricultural, and other lands. BMPs will be constructed at a minimum of 20 high priority sites. About 5000 feet of wooded riparian buffers will be installed to promote shading and cooler water temperatures for salmon. Water quality monitoring will continue at 12 stations.	169,300	150,000	319,300
2002P-13	6 mos	Echo Lake Watershed Survey Echo Lake Association Identify sources and potential sources of phosphorous, sediments, and other pollutants within the watershed and to develop a comprehensive strategy for long-term improvement and protection of pond water quality. Importantly, the survey will serve to initiate a system of regular and productive dialogue between landowners within the watershed, shoreline property owners, the Towns of Fayette, Mount Vernon and Readfield, and the Echo Lake Association.	7,368	2,000	12,368
2002-14	21 mos.	Tripp Lake Watershed Management Plan Development Androscoggin Valley Soil and Water Conservation District Develop a locally generated watershed management plan for the long-term prevention of nonpoint source pollution of Tripp Lake, through interactive public meetings, surveys, and education.	21,645	14,506	36,151
2002-15	18 mos.	Tannery Brook Watershed Management Plan Project Cumberland County Soil and Water Conservation District Develop the Tannery Brook Watershed Management Plan. The project will collect information about the watershed's specific NPS pollution problems and natural resources and work with community and town officials to develop locally supported water quality goals, objectives and action strategies for protecting Tannery Brook. The project will incorporate this information into a formal watershed management plan, to be used to guide long-term stream protection and enhancement efforts.	31,652	21,903	53,555

2002R-16	mos.	Great Pond Watershed NPS Pollution Remediation Project - Phase I Belgrade Regional Conservation Alliance Reduce soil erosion and polluted runoff sources by installing water quality best management practices (BMPs) on medium and high priority NPS sites with costshare assistance, youth conservation corps, and technical assistance. Reduction of pollutant loads to Great Pond will be estimated through soil loss avoidance calculations. The project will help protect and improve the water quality of Great Pond. BMPs will be demonstrated to town officials, lake associations and property owners to promote continuing watershed protection actions. The project implements specific actions called for in the Great Pond Watershed Protection Plan dated June 2001.	63,670	43,572	107,242
2002-17	9 mos.	Pocasset Lake Association Pocasset Lake Association Identify sources and potential sources of phosphorous, sediments, and other pollutants within the watershed and to develop a comprehensive strategy for long-term improvement and protection of water quality. Importantly, the survey will serve to initiate a system of regular and productive dialogue between landowners within the watershed, shoreline property owners, the Town of Wayne, and the Pocasset Lake Association.	6,558	4,496	11,054
2002P-18	mos.	Eddie Brook Watershed Survey Mount Desert Island Water Quality Coalition The immediate goals of conducting a watershed survey are to: 1) increase citizen awareness, expand stakeholder group to get more people involved; 2) combine the efforts of shoreline survey and water quality monitoring with the watershed survey to adequately assess the watershed for existing non-point source pollution problems; and 3) identify priority sites and develop an action plan to implement BMPs. The long term goals of this project are to: 1) eliminate the pollution sources and open the closed clamflats; and 2) initiate watershed projects in the three other towns on MDI: Southwest Harbor, Mount Desert and Tremont.	4,588	6,795	11,383
2002P-19	12 mos.	Trafton Lake Watershed Survey Town of Limestone (1) Expand on citizen and town officials awareness of watershed protection issues in the Trafton Lake watershed; (2) identify, characterize and prioritize nonpoint soil erosion and phosphorous pollution sites to reduce phosphorous loads to the lake; (3) make general recommendation for mitigating these sites to reduce phosphorous loads to the lake; and (4) add to the Trafton Lake watershed "NPS pollution site" database from which candidate sites can be selected for demonstration BMPs.	10,042	6,149	16,191
2002-20	18 mos.	Brettun's Pond Watershed Management Plan Brettun's Pond Association Develop and produce a Watershed Management Plan in order to restore the water quality of Brettun's Pond. This project will consolidate the findings of the Watershed Survey which will be completed in April 2001; evaluate significant erosion and phosphorous loading areas; and develop a locally supported watershed best management practices strategy for those areas for long term stabilization and improvement of Brettun's Pond water quality.	8,404	5,660	14,064
		totals	totals 726,970 560,560		1,287,530

Note: Project identification numbers (Example: #2002R-01) indicate the source of project funds by grant year and funding source. "P" = 604(b) planning funds; "R" = Clean Water Action Plan 319(h) funds.



Stormwater Phase II-Frequently Asked Questions

<u>Delegation.</u> In February 2001, the federal National Pollutant Discharge Elimination System (NPDES) program was delegated to the State of Maine. As part of authorization, Maine is taking over administration of the federal Environmental Protection Agency's (EPA's) stormwater program.

- Currently, the federal program regulates discharges of stormwater to surface waters from certain construction and industrial activities. Each of these major areas is addressed by a current general permit issued by EPA that will provide continuing coverage until superceded by the issuance of a MEPDES permit.
- A second phase of stormwater permitting requirements to cover additional (smaller) construction activities and some urbanized areas has been promulgated by EPA, with compliance schedules. Maine has regulated some aspects of stormwater under the Maine Storm Water Management Law since 1997, and will be looking to build upon the existing program where possible, and remove duplication.

What does Phase II regulate? The new Phase II rules were published December 8, 1999. They applied to two categories of stormwater discharges, certain small MS4s, and stormwater discharges from construction activity disturbing below 5 acres. Good overall references on Phase II are the Storm Water Phase II Compliance Assistance Guide, and EPA's Fact Sheet series on Phase II. The Phase II rules slightly extended a temporary exemption from requirements for industrial activities operated by municipalities with populations less than 100,000, and broadened the existing No Exposure Exclusion.

- MS4s. A "small MS4" is any MS4 not a "medium" or "large" MS4 covered by Phase I of the program. A "regulated small MS4" is (1) a small MS4 located in an "urbanized area" (UA) as defined by the Bureau of Census, or (2) a small MS4 designated by Maine DEP.
- (1) Automatic MS4s. Certain regulated small MS4s were automatically designated by EPA (by rule) based on census data. These MS4s are each part of an urban area with a population of at least 50,000 and a population density of at least 1,000 people per square mile. The U.S. Census Bureau starts by identifying with a "central or urban place". A central or urban place has a population of at least 2,500 and a population density of at least 1,000 people per square mile. Using block group census data, this matrix is expanded, based on population density. If the population reaches 50,000 with a density of 1,000 per square mile, an "urban area" is delineated. The regulated small MS4 is not delineated by municipal boundaries: it is delineated by the criteria above from a concentrated population to a more rural setting until the minimum criteria are no longer triggered. This accounts for the irregular shapes of these MS4s.

EPA designated certain communities in Maine as MS4s, and provided for designation of additional communities by Maine DEP. At Maine DEP's request, EPA agreed to eliminate the Town of Lebanon from EPA's initial list, since it has no "urban place". The automatically designated municipalities included seven greater Portland municipalities (Portland, So. Portland, Scarborough, Cape Elizabeth, Westbrook, Gorham, and Falmouth), a Bangor-area cluster of five communities (Bangor, Brewer, Veazie, Orono, and Old Town), four in the Lewiston area (Lewiston, Auburn, Sabattus and Lisbon), and four along the ME/NH border (Kittery, Elliot, Berwick, and So. Berwick).

- (2) **Additional MS4.** In addition to these communities, the Maine DEP will designate other towns that have the potential to significantly impact receiving waters due to stormwater runoff. State and federal facilities; e.g., universities and military bases; in these communities may also be subject to regulation.
- Industrial activity ("multi-sector"). Under Phase II, industrial activities operated by municipalities (including public works facilities) become regulated. Provisions within the Intermodal Surface Transportation Efficiency Act (ISTEA) delayed the deadline by which Phase I industrial activities operated by municipalities with populations less than 100,000 needed to obtain NPDES stormwater discharge permits. This temporary exemption was provided to allow small municipalities more time to comply. The Phase II rules provided a short further extension, with a new deadline of March 10, 2003 for municipally operated industrial activities to obtain NPDES permit coverage.

The "No Exposure Exclusion" has been expanded to include all Phases I industrial categories, except for construction

• Construction. Phase II extends stormwater regulation to construction activity that disturbs more than 1-5 acres of land, including the disturbance of less than one acre if it is part of a larger common plan of development or sale, that will ultimately disturb an acre or more.

What is the schedule for implementing the Phase II requirements? The Maine DEP is required to have a general permit form available for regulated MS4's and for construction sites by *December 8, 2002.* In regards to the construction general permit, DEP will be looking to build upon the existing Maine program where possible, and remove duplication. Automatically designated MS4s and developers subject to the construction site rules will be required to file for coverage under the general permit by March 10, 2003.

What requirements must a regulated MS4 meet? A regulated MS4 must develop, implement and enforce a program to reduce the discharge of pollutants to the "maximum extent practicable." The program must include six minimum control measures. The regulated MS4 will be required to submit a Notice of Intent and identify the following elements for each control measure: Measurable goals; Best Management Practices; Timing and frequency of the actions; Responsible persons. Record-keeping and reporting will also be required to monitor progress in meeting program goals.

Cal endar of Events

- March 13, 2002. Innovative Erosion Control Products, a conference on Turf Reinforcement Mats will be held at the Augusta Civic Center. FMI contact Bill Laflamme at 287-7726 or William.N.Laflamme@state.me.us
- March 21, 2002. Building Sustainable Organizations for Protection of Maine's Environment. An all-day workshop co-sponsored by Maine Rivers and the Natural Resources Council of Maine. FMI contact Cyndie Beneski at 1-800-287-2345, extension 211 or email cbeneski@nrcm.org.
- April 17, 2002. Conservation Expo. Hosted by the Franklin Co. SWCD. There will be 38 workshops, training sessions and seminars. Topics include: Unpaved Road Maintenance, CLP re-certification, Proper use of Pesticides, Pond Construction, Pond Maintenance, DOT's Drainage Drainage Drainage program, Current Woodlot Programs, and more. FMI contact Rosetta Thompson at 207-778-4279 or rosseta-thopson@me. nacdnet.org
- May 9, 2002. Maine Water Conference. Augusta Civic Center.
- May 17, 2002. Southern Maine Children's Water Festival. FMI contact Marianne Dubois 287-2115 or marianne.d.dubois@state.me.us
- May 17-21, 2002. 3rd Annual River Rally in Asheville North Carolina. FMI visit River Network's web site: www.rivernetwork.org
- <u>May 21-23, 2002</u>. 13th Annual NPS New England Meeting. See front page of this issue for more information.
- June 14, 2002. Milfoil Summit. The Lakes Environmental Association. 207-647-8580.
- June 22, 2002. Annual Congress of Lakes Meeting. Farmington.
- <u>July 5-25, 2002.</u> Seventh Annual Androscoggin River Source to the Sea Canoe Trek. Series of day paddling trips on the Androscoggin River, from Lake Umbagog to Bath. Free and open to the public and lots of fun! FMI, visit the Androscoggin River Watershed Council website at www.androscogginriver.org or contact Trek Coordinator Sue Lincoln at (207) 824-4627 or slincoln@prexar.com
- <u>July 9-12, 16-19, & July 30-Aug 2, 2002</u>. 2002 Forest Of Maine Teachers' Tours. Part of the Maine Tree Foundation's LEAF (Long-Term Education About Forests) Project. Space is limited. FMI 207-621-9872 or mtf@gwi.net

Resources Avail abl e

- Managing Lakes and Reservoirs. By NALMS and the Terrene Institute in 2001. "It is not a science or engineering manual but a good, easy-to-read publication for lake managers/lake association board member types. There is very little that it doesn't cover. You can find it at nalms.org."
- BMPs For Handling Of Wastes and Hazardous Materials at Construction Sites. 2002. By Maine DEP. For a copy contact Maine DEP, State House Station 17, Augusta ME 04333 or 207-287-3901.

Web Sites of Interest

Center for Watershed Protection: www.stormwatercenter.net

Earth Force/Green launched a new web site: Www.green.org. It allows users to enter, analyze, and share their data as they work to improve their local water resources.

Linking Girls to the Land Web site. EPA is hosting a new site for Girl Scouts and their leaders. Www.epa.gov/owow/ adopt/linkgirls

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